



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2014-0054; Directorate Identifier 2014-NM-001-AD; Amendment 39-17754; AD 2014-03-17]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes. This AD requires repetitive inspections for fractured or incorrectly oriented fasteners on the inboard flap hinge-box forward fittings on both wings, and fastener replacement if necessary. This AD was prompted by two reports of fractured fastener heads found on the inboard flap hinge-box forward fitting. We are issuing this AD to detect and correct incorrectly oriented or fractured fasteners, which could result in detachment of the flap hinge-box and the flap surface, and consequent reduced controllability of the airplane.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0054; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Ricardo Garcia, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7331; fax (516) 794-5531.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-39, dated December 6, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or the “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

There have been two in-service reports of a fractured fastener head, on the inboard flap hinge-box forward fitting at Wing Station (WS) 76.50, found during a routine maintenance inspection. Investigation revealed that the installation of these fasteners on the inboard flap hinge-box forward fittings at WS 76.50 and WS 127.25, on both

wings, does not conform to the engineering drawings. Incorrect installation may result in premature failure of the fasteners attaching the inboard flap hinge-box forward fitting. Failure of the fasteners could lead to the detachment of the flap hinge box and consequently the detachment of the flap surface. The loss of a flap surface could adversely affect the continued safe operation of the aeroplane [consequent reduced controllability of the airplane].

This [Canadian] AD mandates a detailed visual inspection (DVI) of each inboard flap hinge-box forward fitting [for incorrectly oriented or fractured fasteners], on both wings, and rectification [fastener replacement] as required. Incorrectly oriented fasteners require repetitive inspections until the terminating action [fastener replacement] is accomplished.

You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0054.

### **Relevant Service Information**

Bombardier has issued Alert Service Bulletins:

- A600-0763, including Appendices 1 and 2, dated September 26, 2013 (for Model CL-600-1A11 (CL-600) airplanes);
- A601-0627, including Appendices 1 and 2, dated September 26, 2013 (for Model CL-600-2A12 (CL-601) and CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes);
- A604-57-006, Revision 01, dated September 26, 2013, including Appendices 1 and 2, dated September 26, 2013 (for Model CL-600-2B16 (CL-604 Variant) airplanes with serial numbers 5301 through 5665 inclusive); and

- A605-57-004, Revision 01, dated September 26, 2013, including Appendices 1 and 2, dated September 26, 2013 (for Model CL-600-2B16 (CL-604 Variant) airplanes with serial numbers 5701 through 5920 inclusive).

The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### **FAA's Determination and Requirements of this AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because incorrectly installed or fractured fasteners could result in detachment of the flap hinge-box and the flap surface, and consequently, reduced controllability of the airplane. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

**Interim Action**

We consider this AD interim action. We are currently considering requiring replacement of incorrectly oriented fasteners, which will constitute terminating action for the repetitive inspections required by this AD action. However, the planned compliance time for the replacement would allow enough time to provide notice and opportunity for prior public comment on the merits of the modification.

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0054; Directorate Identifier 2014-NM-001-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

**Costs of Compliance**

We estimate that this AD affects 105 airplanes of U.S. registry.

We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on

these figures, we estimate the cost of this AD on U.S. operators to be \$8,925, or \$85 per product.

In addition, we estimate that any necessary follow-on actions will take about 58 work-hours per product. We have no way of determining the number of aircraft that might need these actions.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. Therefore, the parts costs are not included in our cost estimate.

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2014-03-17 Bombardier, Inc.:** Amendment 39-17754. Docket No. FAA-2014-0054; Directorate Identifier 2014-NM-001-AD.

**(a) Effective Date**

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Bombardier, Inc. airplanes identified in paragraphs (c)(1) through (c)(3) of this AD, certificated in any category.

(1) Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes, having serial numbers (S/Ns) 1004 through 1085 inclusive.

(2) Bombardier, Inc. Model CL-600-2A12 (CL-601) airplanes, having S/Ns 3001 through 3066 inclusive.

(3) Bombardier, Inc. Model CL-600-2B16 (CL-601-3A, CL-601-3R, & CL-604 Variants) airplanes, having S/Ns 5001 through 5194 inclusive, 5301 through 5665 inclusive, and 5701 through 5920 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by two reports of fractured fastener heads found on the inboard flap hinge-box forward fitting at wing station (WS) 76.50. We are issuing this AD to detect and correct incorrectly oriented or fractured fasteners, which could result in detachment of the flap hinge-box and the flap surface, and consequent reduced controllability of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspection**

Within 100 flight cycles after the effective date of this AD: Do a detailed visual inspection for incorrect orientation and any fracturing (missing fastener heads) of each inboard flap fastener of the hinge-box forward fitting at WS 76.50 and WS 127.25, on both wings, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(4) of this AD.

(1) For Model CL-600-1A11 (CL-600) airplanes having S/Ns 1004 through 1085 inclusive: Bombardier Alert Service Bulletin A600-0763, including Appendices 1 and 2, dated September 26, 2013.

(2) For Model CL-600-2A12 (CL-601) airplanes having S/Ns 3001 through 3066 inclusive, and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes having S/Ns 5001 through 5194 inclusive: Bombardier Alert Service Bulletin A601-0627, including Appendices 1 and 2, dated September 26, 2013.

(3) For Model CL-600-2B16 (CL-604 Variant) airplanes having S/Ns 5301 through 5665 inclusive: Bombardier Alert Service Bulletin A604-57-006, Revision 01, dated September 26, 2013, including Appendices 1 and 2, dated September 26, 2013.

(4) For Model CL-600-2B16 (CL-604 Variant) airplanes having S/Ns 5701 through 5920 inclusive: Bombardier Alert Service Bulletin A605-57-004, Revision 01, dated September 26, 2013, including Appendices 1 and 2, dated September 26, 2013.

**(h) All Fasteners Correctly Oriented and Not Fractured**

If all fasteners are found correctly oriented and not fractured (intact) during any inspection required by paragraph (g) of this AD, no further action is required by this AD.

**(i) Fractured Fasteners**

If any fastener is found fractured (missing fastener head) during any inspection required by paragraph (g) of this AD: Before further flight, remove and replace all fractured fasteners and all incorrectly oriented forward and aft fasteners at WS 76.50 and WS 127.25, on both wings, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(4) of this AD. After accomplishing the replacement required by this paragraph, no further action is required by this AD.

**(j) Incorrectly Oriented Fasteners**

If any fastener is found incorrectly oriented but none are found to be fractured (fasteners found intact) during any inspection required by paragraph (g) of this AD: Repeat the inspection required by paragraph (g) of this AD thereafter at intervals not to

exceed 100 flight cycles until the terminating action specified in paragraph (k) of this AD is accomplished.

**(k) Optional Terminating Action for Incorrectly Oriented Fasteners**

Replacement of all incorrectly oriented forward and aft fasteners at WS 76.50 and WS 127.25, on both wings, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(4) of this AD, terminates the requirements of paragraph (j) of this AD.

**(l) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York Aircraft Certification Office, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer, use these actions if they are FAA-approved. Corrective

actions are considered FAA-approved if they were approved by the State of Design Authority (or its delegated agent, or the DAH with a State of Design Authority's design organization approval). For a repair method to be approved, the repair approval must specifically refer to this AD. You are required to ensure the product is airworthy before it is returned to service.

**(m) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-39, dated December 6, 2013, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0054.

**(n) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Alert Service Bulletin A600-0763, including Appendices 1 and 2, dated September 26, 2013.

(ii) Bombardier Alert Service Bulletin A601-0627, including Appendices 1 and 2, dated September 26, 2013.

(iii) Bombardier Alert Service Bulletin A604-57-006, Revision 01, dated September 26, 2013, including Appendices 1 and 2, dated September 26, 2013.

(iv) Bombardier Alert Service Bulletin A605-57-004, Revision 01, dated September 26, 2013, including Appendices 1 and 2, dated September 26, 2013.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on February 3, 2014.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

